

ABSTRACT

An organic light emitting diode (OLED) is used to realize a full-color display device. More particularly, a polymer OLED is used to increase uniformity in thickness of a layer formed of polymer ink, and to prevent mixing of colors. The OLED includes a substrate having a first electrode layer formed thereon in a predetermined pattern, an insulator layer formed on the substrate forming a channel in a predetermined pattern, an organic polymer layer formed based on the channel and having at least an emission layer, a barrier formed at either side of the insulator layer of at least one end of the channel for preventing ink for the organic polymer layer from running out of both ends of the channel, and a second electrode layer formed on the polymer organic layer.